

Claims

1. The invention is a light-weight reconstructable wall panel. The invented central layer of the Wall Panel is composed of at least no less than two pieces of fine sand gypsum or sand and cement boards with fiber glass mesh installed inside and at least no less than one piece of polystyrene foam board in between. Its front layer and bottom layer are designed with fine sand gypsum or sand and cement boards with glass fiber mesh inside as well.

2. According to designated patent application as described in item no.1, one of the invented design of reconstructable wall panel is that the wall panel central layer's modified gypsum or sand and cement with fiber glass mesh inside has some chemical additives and fine sand. This modified gypsum or sand and cement include 10% to 30% (by weight ratio) fine sand in the granular size between 0.25 to 1.5 mm.

3. According to designated patent application as described in item no. 1, one the invented design of the reconstructable wall panel is that the thickness of the wall panel central layer, having modified gypsum or sand and cement with fiber glass mesh inside, is between 8 - 12 mm.

4. According to designated patent application as described in item no. 1, one of the invented design of the reconstructable wall panel is that the fiber glass mesh installed in the wall panel is at mesh eyelet size between 3 mm x 3 mm to 5mm x 5mm.

5. According to designated patent application as described in item no. 1, one of the invented design of the reconstructable wall panel is that the fiberglass mesh inside the modified gypsum or sand and cement board is to extend outside the wall panel at 15mm to 35mm at left and right side and 30mm to 60mm at top and bottom of the panel.

6. According to designated patent application as described in item no. 1, one of the invented design of the reconstructable wall panel is that the internal reconstructable wall panel is composed of 5 layers. The first (front), third and fifth (bottom) layers are designed with fiber glass mesh inside the modified gypsum or sand and cement while the second and fourth layers are designed with polystyrene foam board.

7. According to designated patent application as described in item no. 1, one of the invented design of the reconstructable wall panel is that the EXTERNAL reconstructable wall panel is composed of 5 layers. The first (front) layer is designed with fiberglass mesh inside the cement board composed of fine

sand (with granular size between 0.25mm to 1.50mm) and cement. The third and the fifth layer are designed with fiberglass mesh inside the modified gypsum board while the second and the fourth layers are designed with polystyrene foam board.